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## PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

200301980-2

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on 8/17/05

Signature Margaret A. Norcutt

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Application Number

10/004,157

Filed

10/31/01

First Named Inventor

Beth T. Logan

Art Unit

2165

Examiner

Mahmoudi, Hassan

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s). See Remarks Letter for Pre-Appeal Brief Request for Review  
Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest.  
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.  
(Form PTO/SB/96)

☒ attorney or agent of record.  
Registration number 31,804

☐ attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34 \_\_\_\_\_

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8/17/05

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.  
Submit multiple forms if more than one signature is required, see below\*.

☒ \*Total of 1 forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Beth T. Logan and Ariel Salomon

Application No.: 10/004,157 Group: 2165

Filed: October 31, 2001 Examiner: Mahmoudi, Hassan

Confirmation No.: 8521

For: MUSIC SIMILARITY FUNCTION BASED ON SIGNAL ANALYSIS

CERTIFICATE OF MAILING OR TRANSMISSION	
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Date	Signature
<u>Margaret A. Norcitt</u>	
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REMARKS LETTER FOR PRE-APPEAL BRIEF REQUEST FOR REVIEW

Mail Stop AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

The following is being submitted together with a Notice of Appeal under 37 C.F.R. § 41.31 and in support of a Pre-Appeal Brief Request for Review in the above-identified application.

In the subject application a final Office Action dated May 17, 2005 finally rejected Claims 1-2, 6, 16, 29-32, 35-36 and 39-48 under 35 U.S.C. § 103(a) as being unpatentable over Yourlo (U.S. Patent No. 6,201,176) in view of Sanderson (U.S. Patent No. 6,545,485); Claims 3-5, 7-13 and 17-28 under § 103(a) as being unpatentable over Yourlo in view of Sanderson and further view of Hoory et al. (U.S. Patent No. 6,678,655); Claims 14-15 and 33-34 under 35 U.S.C. § 103 as being unpatentable over Yourlo, in view of Sanderson, in view of Hoory et al.

and further in view of Walker et al. (U.S. 6,710,822); and Claims 37 and 38 under 35 U.S.C. § 103 as being unpatentable over Yourlo, in view of Sanderson and further in view of Bloom et al. (U.S. Patent No. 4,591,928).

Applicants believe these rejections of record are clearly not proper and are without basis. In support of this position, the below presents clear legal and/or factual deficiencies in the rejections.

1. At the top of page 3 of the subject final Office Action, it is stated that Yourlo teaches "...for each musical work in the plurality, (ii) a rhythmic beat representation from the corresponding audio file (see column 1, lines 43-47 and see column 5, lines 37-42);..." However, Yourlo's mere discussion of a method for extracting the tempo from an audio representation does not teach or suggest the claimed limitation of forming a rhythmic beat representation as argued on page 4, second and third paragraphs of Applicants' paper filed under § 116 on July 5, 2005.

2. At page 3, lines 8-11 of the final Office Action at hand, it is stated that Yourlo teaches "...for a given musical work of interest:...(c) summing, including respective weighting of results of the comparisons in (a) and (b), (see column 5, lines 58-65, and see column 6, lines 49-53) the summed results providing an indication of which musical works in the plurality are similar to the given musical work of interest (see column 10, lines 16-57, and see column 11, lines 10-26.)" However, Yourlo sums the coefficients of each window of a Fast Fourier Transform during the extraction process of a single feature and merely discusses using the extracted features of the audio to provide an indication of similarity. (See column 5, lines 58-65; column 12, line 44 - column 13, line 37; Figure 5 and Figures 18-21.) Yourlo does not sum the **results** of the respective feature comparisons of the audio representations (a claim limitation in each of the pending base claims (e.g., Claims 1, 35, 42 and 45-48) as argued on the last half of page 4 in the paper filed on July 5, 2005).

3. On page 4 of the subject final Office Action at the paragraph regarding Claim 6, it is stated that Yourlo "...teaches further comprising performing a windowing function on each frame (see Yourlo, column 3, lines 20-28.)" However, the cited discussion of Yourlo segments a piece of music into a plurality of windows. This does not teach or suggest or otherwise make

obvious Applicants' claimed "performing a windowing function on each frame" as argued on page 5, third paragraph in the § 116 paper filed July 5, 2005.

4. Regarding Claim 19 on page 10 of the Office Action at hand, the penultimate paragraph states that Yourlo "...teaches computing a similarity matrix for the audio file (see Yourlo, column 4, lines 6-7.)" However, Yourlo discusses computing a distance metric between two pieces of music and not the claimed similarity matrix as argued on page 5, fourth paragraph of the § 116 paper filed on July 5, 2005.

5. Regarding dependent Claim 29, page 4 the penultimate paragraph of the Office Action at hand states that Yourlo "...teaches generating a set of similar musical works for a given musical work of interest (see Yourlo, column 10, line 58 through column 11, line 9.)" However, Yourlo discusses searching a database for matches for a music query and does not generate a set of similar musical works as claimed in the present invention. See arguments on page 5, penultimate paragraph of Applicants' § 116 paper filed on July 5, 2005.

6. On subject final Office Action page 4 last paragraph, it is stated that Yourlo "...teaches visually displaying on a display device, the musical works in a manner illustrating relative similarities or dissimilarities of the musical works (see Yourlo, column 12, lines 33-44, and see column 15, line 28 through column 16, line 15.)" However, Yourlo discusses graphs illustrating features of the different musical pieces for selection purposes and does not discuss how results of comparisons (e.g., relative similarities or dissimilarities) would be visually displayed on a display device in contrast to dependent Claim 30 of the present invention as argued on page 5, last paragraph of the § 116 paper filed July 5, 2005.

7. Regarding dependent Claim 32 the subject Office Action at page 5, paragraph 2 states that Yourlo "...teaches constructing a matrix of song similarity based on the relative distance (see Yourlo, column 2, lines 51-57.)" However, Yourlo's discussion of manual categorization here does not teach or suggest the claim limitation of "constructing a matrix of song similarity based on the relative distance" as argued on the top of page 6 of the § 116 paper filed July 5, 2005 in the instant application.

8. In addition to the cited art not meeting the claim limitations recited in the foregoing paragraphs 1-7, the subject final Office Action lacks essential elements for making a prima facie rejection. To establish a prima facie case for obviousness under 35 U.S.C. § 103(a),

(1) there must be some suggestion or motivation to combine reference teachings; (2) there must be a reasonable expectation of success; and (3) the references once combined must teach or suggest of all the claim limitations.

As argued at page 6, second paragraph of Applicants' § 116 paper filed July 5, 2005, (a) there is no motivation to combine the references each directed to solving a different problem, and (b) even when combined, the references do not teach or suggest all the claim limitations (for example, see paragraph 2 above).

### CONCLUSION

According to the foregoing, it is respectfully requested that the panel find:

- (i) that all existing claims are in condition for allowance and that the application should pass to issue,  
or in the alternative
- (ii) that there is allowable subject matter in the claims and prosecution on the merits should be reopened with an appropriate office communication.

Respectfully submitted,

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